

Product name: AirBliss+®

Name in brief: Respiratory Smart Tech wearable protection mask against air pollution

Company: AirBliss+ (<https://airblissplus.com/>)

INNOVATION	APPLICABILITY & SUSTAINABILITY	RESULTS	
<p>The first generation AirBliss+® air pollution mask Smart Tech wearable includes an LED filter change alert, an LED low battery alert, night LEDs, and a two-speed BreatheEase™ Fan system to support the wearer during moderate exercise. The system allows for a seam-less breathing experience with controlled heat and humidity levels. Additional features of the mask include a secure seal system, and adjustable harness to ensure a secure fit. The innovation is the way of functioning on delivering a connected respiratory protection where every wearer is protected against air pollution and receives real-time crowdsourced ambient pollution data. These data are the foundation of new web services that deliver accurate, real-time air pollution maps & forecasts and a wealth of services that are unparalleled today.</p>	<p>Before the Covid-19 pandemic, the product was targeted at scooter and bicycle users. After the pandemic, people have started to use protection masks in their everyday lives. The applicability of the innovation widens, at least in the European market and can become part of the smart city green technologies particularly in the cities, which fight against air pollutions like by fine dust particles, cars exhausts, harmful industrial emissions, solid fuel combustion, etc. The existence of a small powered electronic device allows for the incorporation of sensors that warns the user when to change the filter and informs about the quality of air.</p>	<p>Unique in its kind, this respiratory encourages widespread use for prolonged hours and daily usage. The impact is mainly in bettering quality of life in the urban areas and achievement of more societal protection from pollution and fighting with different kind of pandemic, such like the corona-virus.</p> <p>The use of the mask will result in better protection of the citizen in Europe against air pollution in the cities and give the local governments one additional tool for the smart cities' strategies and action plans implementation.</p>	
<p>Three key DRIVERS</p>	<p>1. Increasing air pollution Increasing needs for better protection against air pollution in biggest part of the world. Green planet policy requirements are must.</p>	<p>2. Multiple applications Openness for permanent improvements. For example, small batteries in the mask allow for multiple applications (for instance, lights to cycle at night, air-monitoring sensors, etc.)</p>	<p>3. Public & individual needs overlap This is the engine of growth in the future. It protects individuals from ambient air pollution but is an instrument for smart city protection policy implementation.</p>
<p>Three key BARRIERS</p>	<p>1. CEE certification Overcame through excellent preparation of the prototype and its testing and technology validation.</p>	<p>2. Funding needs A hardware product (instead of software) requires significant financial investments to move from prototype to a concrete delivery product.</p>	<p>3. Venture capital attracting Difficulty in attracting investment from Venture Capital and banks are overcome with support of professional networking and good advisers</p>
<p>Three key ENABLERS</p>	<p>1. High level protection of IP Fast and stable protection of intellectual property in the Netherlands has allowed for the smooth, unhurried development of the functional characteristics of the product before it is commercialized.</p>	<p>2. The stability of the country Netherlands is economically and politically stable country. This enabled the startup company a smooth development of the technology (innovation) and a relatively easy access to market, advises and support programmes.</p>	<p>3. Top priority of many governments Green economy and better and healthy life of people in the world and in the EU are within top most important priorities. This creates market for such technologies by default. The coronavirus crisis proved that the protection of breath of people will stay a challenge in the future and creates sustainable market needs.</p>
<p>Three key IMPACTS</p>	<p>1. Efficiency of individual protection Improves the quality of life of many citizens at a low public cost. Increase the offer of protective wear (first directed to pollution, now also protects against SARS-CoV-2)</p>	<p>2. Increased efficiency of the smart city management An additional and quickly applicable means of protection in extreme situations such as pandemics, industrial accidents, and etc. The technology is easily integrated into urban policy to protect smart cities as a whole.</p>	<p>3. Reduced morbidity of citizens The easy access to such masks and the information provided by the sensors give people a chance to reduce their direct contact with harmful air. Preventive reduction of morbidity and the spread of harmful substances and viruses is achieved.</p>
<p>What's next</p>	<p>The company is already working on the second release to incorporate a Gas pollutant sensor including NO2 concentration monitor with high-level alert function. Their mission is to enable mass adoption of anti-pollution masks in order to protect city dwellers in highly polluted urban areas around the world.</p> <p>The main plan is to make the innovation smarter (for instance, adding sensors with multiple capacities). Move from a B2C to a B2B type of market (for instance, expanding the market to companies that work in hazard environments and might need a protective mask.)</p>		